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ENGINEERING, PA

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## CATES CREEK APARTMENTS

### NARRATIVE SUBMITTAL RESPONSE ITEMS

#### LAND SUITABILITY ANALYSIS:

The existing site grade is moderate, averaging approximately 6%. The majority of the site drains westward, and primarily to the northwest (where there are double 36" RCP's that run under the proposed Cates Creek Parkway). The south end of the site contains a stream running east to west, with a 50' buffer per Plat book and page 99/138 and 100/184-185.

Total disturbed area with proposed grades encompasses approximately 16 acres of the 21.299-acre site. Approximately 9 acres will consist of impervious area comprised of parking lot, buildings, sidewalks/patio/pool deck.

Approximately .97 acres of existing topography exceed 25%. Of the .97 acres exceeding 25%, about 88% exists where the grade of the constructed College Park Road and Cates Creek Parkway transition to the site.

Preliminary reviews of onsite soil types include Herndon silt loam and Georgeville silt loam.

The site is currently wooded. Existing vegetation is largely made up of smaller pines. An increasing number of hardwoods are clustered within the southern part of the site and the northwest of the site.

#### ENVIRONMENTAL PROTECTION PLAN:

A concerted effort has been made from the earliest point in the design phase of this project to identify the environmentally sensitive areas within the site and work toward creating a strategy for the project that is both socially and environmentally responsible.

The existing stream buffer per Plat book and page 99/138 and 100/184-185 will be maintained as undisturbed. As a result of the existing stream and the notable collection of larger, existing hardwoods on the south end of the site, a 4.7-acre undisturbed area will provide additional protection for remaining vegetation and stream condition.



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Proposed grades for the site follow the existing contours as much as possible to the extent that that natural drainage patterns are maintained and the proposed earthwork balances; so as not to disturb more area than necessary.

Erosion Control and Stormwater management measures are provided through calculated inlet and outlet protection, silt fencing, and a designed BMP. A priority is placed on natural infiltration, evapotranspiration, and nutrient reduction.

#### INTENDED/PREFERRED GREEN BUILDING OR SUSTAINABLE BUILDING RATING SYSTEM:

An application for LEED Certification for this project is not intended. However, key design criteria per USGBC standards provide guidance and influence on the methodology for the project as a whole. This includes, but is not limited to: walkability, reduced automobile dependency, Housing and Jobs proximity, visitability and universal design, and access to recreation facilities.

#### APPLICANT'S EXPECTED WATER USAGE AND CONSERVATION EFFORTS:

Anticipated water demands have been estimated on a preliminary basis by the MEP engineer. An average water usage of 45 gpd has been assumed per person, per building. A further assumption can be made that 35 people typically occupy a single building. With 13 buildings, at 35 people/building, at 45 gpd per person, estimated water usage would be around 20,475 gpd ( $45 \times 35 \times 13 = 20,475$  gpd). Water-efficient landscaping design will serve as one of the focal points in the reduction of overall potable water usage for the project. The installation of native plantings and suitable design densities within their respective microclimate will be incorporated into the design. If applicable, irrigation efficiency will be promoted through drip irrigation and rain sensors. Additional water-reduction factors are and will be influential to water reduction through cluster development and appliance selection.

#### APPLICANT'S SUPPORT OF HOUSING TYPE AND PRICE POINT DIVERSITY:

This project is intended to provide a product that is both socially and economically responsible. The unit mix and correlating price points for each unit type are expected to meet the needs of the geographic location of the project. The proposed passive and active recreation areas for this project, along with the pedestrian-oriented interconnectivity of the project are intended to encourage and promote community networking through accessibility. Additionally, accessibility is provided through implementation of "Type A" accessible units throughout the project. (4) 1 bedroom, (8) 2-bedroom, and (3) 3-bedroom units are currently proposed.

STATEMENT REGARDING PROJECT CONFORMITY PER UDO 3.8.3 (GENERAL STANDARDS/FINDING OF FACT):

\*See attached document dated June 10, 2014.

NOISE LEVEL DOCUMENTATION FOR THE SOLID WASTE COMPACTOR PER UDO:

\*See attached RJ-250SC Marathon Compactor specifications and corresponding decibel readings.





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### STATEMENT REGARDING PROJECT CONFORMITY PER UDO 3.8.3 (GENERAL STANDARDS/FINDING OF FACT)

#### 3.8.3

(a). A concerted effort has been made to ensure that this development is located, designed, and proposed to be operated so as to maintain the public health, safety, and general welfare. The site location contains no wetlands, contains no development within a floodplain, does not disrupt any greenfield agricultural sites, and contains no classified cultural resources. The design promotes compact development (allowing for significant open space and reducing the development footprint), limits disturbance to existing mature vegetation, avoids riparian buffer disturbance and provides accessible and abundant passive and active recreation.

(b). The use and development complies with all required regulations and standards of this ordinance, including all applicable provisions of Articles 4,5, and 6 and applicable regulations. The proposed use is allowable within its respective zoning district (Entranceway Special Use). A waiver is being requested for the proposed density of 270 units (271 units were approved within the original Waterstone Masterplan per a tract-acreage discrepancy). Required setbacks, buffers, tree preservation, steep slope provisions, and stormwater provisions are provided for. Waivers for parking counts and locations, grading area, and driveway location are being requested.

(c). The use and development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property. The site location, design, and proposed operation will enhance the value of property by providing feasible housing proximity for jobs and civic, institutional, and recreational venues.

(d). The use and development conforms with the general plans for the physical development of the Town and is consistent with the Town's Comprehensive Plan. The proposed site makes up Tract 6 of the Waterstone Master plan. The approved Waterstone mixed-use development currently has 134 single-family units approved, 128 multi-family units approved, with preliminary approval for an additional 271 units. Neighboring additional uses already located within the Master Development include the Cates Creek Community Park, a daycare/preschool, a Durham Tech campus, and a portion of the UNC hospital system (per Hillsborough Planning website).



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